

**BUREAU OF HIGHWAYS
REQUEST FOR PROPOSAL
for
QUALIFICATIONS BASED SELECTION FOR PREQUALIFIED SERVICES**

The Michigan Department of Transportation (MDOT) is seeking professional services for the project contained in the attached scope of services.

If your firm is currently prequalified for this type of work and you are interested in providing services, please indicate your interest by submitting a Proposal. The Proposal must be submitted in accordance with the latest "Vendor Selection Guidelines for Service Contracts", available on the MDOT website.

For efficiency sake, we are asking that the vendor firm provide 3 paper copies of the Proposal to the MDOT project manager named in the attached scope of services.

These copies must be received by **4:00 p.m. February 22, 2005**. Fax and electronic copies are not acceptable.

In addition, provide one unbound copy to:

Regular Mail:

Secretary, Operations Contract Support
Michigan Department of Transportation
P.O. Box 30050
Lansing, MI 48909

OR

Overnight Mail:

Secretary, Operations Contract Support
Michigan Department of Transportation
425 W. Ottawa
Lansing, MI 48933

This copy is to be received within three working days after the due date and time specified above. Please do not deliver in person.

Any questions relative to the scope of services must be submitted by e-mail to the MDOT project manager. Any questions must be asked at least three working days prior to the due date and time specified above. All questions and their answers will be placed on the MDOT website as soon as possible after receipt of the questions. The names of vendors submitting questions will not be disclosed.

For a cost plus fixed fee contract, the selected vendor must have a cost accounting system to support a cost plus fixed fee contract. This type of system has a job-order cost accounting system for the recording and accumulation of costs incurred under its contracts. Each project is assigned a job number so that costs may be segregated and accumulated in the vendor's job-order accounting system.

The selection team will review the information submitted and will select the firm considered most qualified to perform the engineering services based on the proposals. The selected vendor will be contacted to confirm capacity. Upon confirmation, that firm will be asked to prepare a priced proposal. Negotiations will be conducted with the firm selected.

The maximum allowable pages for your proposal shall follow the guidelines detailed in Exhibit F of the Vendor Selection Guidelines (October 2004) for \$25,000/\$100,000.

MDOT is an equal opportunity employer and MDOT DBE firms are encouraged to apply. The participating DBE firm, as currently certified by MDOT's Office of Equal Opportunity, shall be listed in the Proposal.

The scope of services is attached to this solicitation.

SCOPE OF DESIGN SERVICES
CS 76823 – JN 80734C
Old 69 (Lansing Road), Shiawassee County

I. PRIMARY PREQUALIFICATION CLASSIFICATION

Road Design: Roads and Streets

II. SECONDARY PREQUALIFICATION CLASSIFICATION

**Design Surveys: Road Design Surveys
Right-of-Way Surveys**

Traffic Plans: Maintaining Traffic Plans & Provisions

III. DBE REQUIREMENT

DBE Requirement: 10%

MDOT Project Manager:

Robert Leppala

Address: 1019 Trowbridge Road, East Lansing, MI 48823

Phone: 517-324-2273 Fax: 517-324-0294

email: leppalar@michgian.gov

IV. SCOPE OF CONSULTANT DUTIES

Complete the design of this project including, but not limited to the following:

- A. Perform field pickup design surveys as needed to supplement and update existing data and as needed for ROW plan development.
- B. Perform a video inspection of the existing 850-foot long 12-inch diameter storm sewer crossing under Old 69 at approximate station 762+00.
- C. Prepare required plans, profiles, typical cross-sections, details, and specifications required for design and construction.
- D. Compute and verify all plan quantities.

- E. Prepare construction staging plans (if required) and special provisions for maintaining traffic during construction.
- F. Prepare Right-Of-Way plans as required to locate, verify and purchase real estate and/or obtain construction access permits for this project.
- G. Provide solutions to any unique problems that may arise during the design of this project.
- H. The Consultant may be required to provide Design Services during the construction phase of this project. If Construction Assistance is required, then a separate authorization for those services will be issued.

V. PROJECT LOCATION

The project is located on Old 69 (also known as Old M-78) from M-52 easterly to 1.1 miles east of M-52, in the City of Perry and Perry Township, Shiawassee County.

VI. PROJECT DESCRIPTION

This project consists of all work related to designing this roadway rehabilitation project, including but not limited to the following: Detail 7 & Detail 8 pavement joint & crack repair, cold-milling, 2-course HMA overlay, intermittent ditching and miscellaneous drainage improvements.

Work shall conform to current MDOT, FHWA, and AASHTO practices, guidelines, policies, and standards (i.e., Road Design Manual, Standard Plans, Drainage Manual, Roadside Design Guide, A Policy on Geometric Design of Highways and Streets, Michigan Manual of Uniform Traffic Control Devices, etc.).

VII. PROJECT CONSTRUCTION COST

- A. The estimated cost of construction is:

1.	HMA Surfacing and Class II Shoulder	\$160,000.00
2.	Ditching and drainage improvements	\$60,000.00
3.	Joint Repair and Pavement Patching	\$112,500.00
4.	Maintaining Traffic	\$30,000.00
5.	Miscellaneous	<u>\$50,000.00</u>
	CONSTRUCTION TOTAL	\$412,500.00

- B. The estimated cost of real estate is: \$5,000.00

The above construction total is the amount of funding programmed for this project. The Consultant is expected to design the project within the programmed amount.

If at any time the estimated cost of construction varies by more than 5% of the current programmed amount, then the Consultant will be required to submit a letter justifying the changes in the construction cost estimate.

VIII. PROJECT SCHEDULE

The anticipated start date of the service is **April 1, 2005**

The anticipated completion date for the service is **January 31, 2006**

The scheduled Consultant's plan completion date for this project is **September 16, 2005**. The Consultant shall use the following events to prepare the proposed implementation schedule as required in the Guidelines for the Preparation of Responses on Assigned Design Services Contracts. These dates shall be used in preparing the Consultant's Monthly Progress Reports.

<u>Target</u> <u>Date</u>	<u>Task #</u>	<u>Description</u>
04/01/2005		Anticipated Notice To Proceed
04/06/2005		Scope Verification Meeting
	3330	Conduct Design Survey
		Submit Survey Final Deliverables
	3360	Prepare Base Plans
05/16/2005		Submit Base Plans
	3361	Preliminary Right-Of-Way Plans
05/16/2005		Submit Preliminary Right-Of-Way Plans
	3380	Review Base Plans
	3540	Develop Construction Zone Traffic Control Plan
	3580	Develop Preliminary Plans
06/28/2005		Submit Preliminary Plans
06/28/2005		Submit Final Right-Of-Way Plans
	3581	Final Right-Of-Way Plans
	3590	Review Preliminary Plans (The Plan Review)
07/28/2005		Hold The Plan Review Meeting
	3830	Complete the Construction Zone Traffic Control Plan
	3840	Develop Final Plans and Specifications
08/19/2005		Submit Final Plan/Proposal Package to MDOT for final review
	3870	Hold Omissions/Errors Check (OEC) Meeting
09/01/2005		Omissions/Errors Check (OEC) Meeting (approximate date)
09/16/2005		Consultant's Plan Completion: Final Construction
		Plan/Proposal package with recommendations incorporated to MDOT
01/31/2006		Final Deliverables to MDOT

IX. MONTHLY PROGRESS REPORT

On the first of each month, the Consultant Project Manager shall submit a monthly project progress report to **Robert Leppala**, Project Manager. The monthly progress report shall follow the guidelines in Attachment D.

X. FORMAT

Full size plans (cut size 24" x 36") and half size (cut size 11" x 17") consisting of plan sheets will be required. Profile sheets will be required in areas of ditching and/or drainage improvements. The plan sheets will require a scale of 1"=100'.

Other plan sheets that are required for this project shall be completed by the Consultant. These include, but are not limited to the following plan sheets:

- A. The title sheet. MDOT will provide a map of the area on a disk in our workstation format. If the map is not available, MDOT will provide a map that could be used. The Consultant shall be responsible for any revisions to the title sheet and the title sheet and map shall meet MDOT format and layout guidelines.
- B. Note Sheet.
- C. Typical Cross-Sections.
- D. Project specific Special Details.
- E. Construction staging and traffic control plans, where needed.
- J. Vicinity sheet.
- K. Alignment sheet.
- L. Witness and benchmark sheet(s).
- M. Soil boring log sheet(s).

All plans, special provisions, estimates, and other project related items shall meet all MDOT requirements and detailing practices (i.e., format, materials, symbols, patterns, and layout) or as otherwise directed by the Project Manager.

All plans, specifications, and other project related items are subject to review and approval by MDOT.

XII. UTILITIES

The Consultant shall be responsible for showing on the plans the location and names of all existing utilities within the limits of the project. In the course of resolving utility conflicts, the Consultant shall make modifications to the plans or design details and provide assistance as directed by the MDOT Utility Permits Engineer and/or Project Manager. The Consultant shall attend any utility meetings called to ensure that the concerns are addressed on the plans involving utilities. The Consultant shall assist in the review of utility permit requests to ensure compatibility with the project.

XIII. TRAFFIC CONTROL AND MDOT PERMITS

The Consultant shall be responsible for all traffic control required to perform the tasks as outlined in this Project Scope of Design Services.

The Consultant shall be responsible for obtaining up to date access permits and pertinent information for tasks in MDOT Right of Way (ROW). This information can be obtained through Joe Rios, Utilities/Permits Section, Real Estate Division at (517) 241-2103

XIV. PRE-QUALIFICATION AND SUBCONTRACTING OF CONTRACT WORK

Any task(s) for which the Consultant is not prequalified must be completed by a Subcontractor that is pre-qualified for that task(s). Any questions regarding prequalification should be directed to Phil Brooks, Prequalification Manager, at (517)335-2514.

The Department's prequalification is not a guarantee or warranty of the subcontractor's ability to perform or complete the work subcontracted. The Consultant remains fully responsible to the Department for completion of the work according to the authorization as if no portion of it had been subcontracted.

All subcontractor communications with the Department shall be through the Consultant to the MDOT Project Manager. This requirement may be waived if a written communication plan is approved by the MDOT Project Manager.

The Department may direct the immediate removal of any subcontractor working in violation of this subsection. Any costs or damages incurred are assumed by the Consultant by acceptance of the authorization. It is further understood that the Consultant's responsibilities in the performance of the contract, in case of an approved subcontract, are the same as if the Consultant had handled the work with the Consultant's own organization.

XV. CONSULTANT RESPONSIBILITIES (GENERAL)

- A. Meet with the MDOT Project Manager to review project, location of data sources and contact persons, and review relevant MDOT operations. The Consultant shall review and clarify project issues, data needs and availability, and the sequence of events and team meetings that are essential to complete the design by the project plan completion date. Attention shall be given to critical target dates that may require a large lead time, such as geotechnical requirements, ROW submittal dates, Railroad coordination requirements, utility conflict resolution, local agency meetings, etc.
- B. Maintain a Design Project Record which includes a history of significant events (changes, comments, etc.) which influenced the development of the plans, dates of submittals and receipt of information.
- C. **P/PMS TASK 3330 - CONDUCT DESIGN SURVEY**
Perform surveys as necessary to design this project (see Attachment A). The Consultant's survey shall be as complete and accurate as necessary to:
1. Calculate and verify plan quantities to the Consultant's standards.
 2. Locate and lay out the future construction of this project.
 3. Perpetuate affected property controlling corners for monument preservation.
- As part of the design proposal, the Consultant shall present a detailed survey work plan for review, evaluation and acceptance by the MDOT Project Manager. A final survey report for review and approval by the MDOT Survey Unit **is** required. Acceptance of the survey by MDOT Design Survey does not in any way relieve the Consultant of responsibility and liability for the content of the survey.
- D. **P/PMS TASK 3360 - PREPARE BASE PLANS**
See Consultant Manual Attachment C for details.
- E. **P/PMS TASK 3361 - SUBMITTAL OF PRELIMINARY RIGHT-OF-WAY PLANS**
See Consultant Manual Attachment C for details. The anticipated ROW requirements on this project consists of proposed ROW at one location on the south side of Old 69 from approx. station 760+00 to 762+00 for the existing drainage structure and storm sewer pipe that is currently outside of the existing roadway ROW.
- F. **P/PMS TASK 3380 - REVIEW BASE PLANS**
See Consultant Manual Attachment C for details.
- G. Perform culvert design calculations, including appropriate outlets and energy dissipation if necessary, as outlined in the MDOT Drainage Manual. Submit all design calculations, drainage maps, and proposed profiles to the MDOT Project Manager for review prior to the Plan Review.

- H. The consultant shall identify the locations of any water main and/or sanitary sewer on the project.
- I. If watermain and/or sanitary sewers are present within the project limits, the CONSULTANT shall evaluate the necessity for the relocation of water mains and sanitary sewers, in accordance with Design Division's Informational Memorandum #441B and #402R dated April 13, 1992. The CONSULTANT shall submit a report to Steven J. Urda, Design Engineer - Municipal Utilities, Design Division for review and concurrence. A copy of the report shall be sent to the Project Manager. **If relocation is necessary and watermain and/or sanitary sewer work is not part of the Scope Of Work, contact the MDOT Project Manager immediately.**
- J. **P/PMS TASK 3540 - DEVELOP CONSTRUCTION ZONE TRAFFIC CONTROL PLAN**
See Consultant Manual Attachment C for details.
- K. **P/PMS TASK 3580 - DEVELOP PRELIMINARY PLANS**
See Consultant Manual Attachment C for details. See Attachment B for details of videotaping storm sewer requirements.
- L. **P/PMS TASK 3581 - FINAL RIGHT-OF-WAY PLANS**
See Consultant Manual Attachment C for details.
- M. **P/PMS TASK 3590 - REVIEW PRELIMINARY PLANS (THE PLAN REVIEW)**
See Consultant Manual Attachment C for details.
- N. **P/PMS TASK 3830 - COMPLETE THE CONSTRUCTION ZONE TRAFFIC CONTROL PLAN**
See Consultant Manual Attachment C for details.
- O. **P/PMS TASK 3840 - DEVELOP FINAL PLANS AND SPECIFICATIONS**
See Consultant Manual Attachment C for details.
- P. **P/PMS TASK 3870 - HOLD OMISSIONS/ERRORS CHECK (OEC) MEETING**
See Consultant Manual Attachment C for details.
- Q. **P/PMS TASK 5010 - CONSTRUCTION PHASE ENGINEERING AND ASSISTANCE**
The Consultant may be required to provide Design Services during the construction phase of this project. If Construction Assistance is required, then a separate authorization for those services will be issued.
- R. If excavation is required, submit the excavation locations which may contain contamination. Project Manager then can proceed in requesting a Preliminary Project Assessment (PPA).

- S. The Consultant representative shall record and submit type-written minutes for all project related meetings to the MDOT Project Manager within two weeks of the meeting. The Consultant shall also distribute the minutes to all meeting attendees. MDOT will provide and distribute official meeting minutes for the Base Plan Review Meeting (if meeting necessary) and The Plan Review Meeting.
- T. Attend information meetings (i.e., public hearings, open houses, etc.) with the public and public officials to assist in responding to concerns and questions. May require the preparation of displays such as maps, marked-up plans, etc.
- U. Prepare and submit any information, calculations, hydraulic studies, or drawings required by MDOT for acquiring any permit (ie. NPDES, DEQ, etc), approvals (ie. county drain commission) and related mitigation. MDOT will submit permit requests.
- V. Attend any project-related meetings as directed by the MDOT Project Manager.
- W. The Consultant shall assist in the review of driveway and utility permit requests, incorporate the information in the design plans and respond within 2 weeks from receipt of the permit.
- X. The MDOT Project Manager shall be the official MDOT contact person for the Consultant **and shall be made aware of all communications regarding this project.** The Consultant must either address or send a copy of all correspondence to the MDOT Project Manager. This includes all Subcontractor correspondence and verbal contact records.
- Y. The Consultant shall contact the MDOT Project Manager whenever discoveries or design alternatives have the potential to require changes in the scope, limits, quantities, costs, or right-of-way of the project.

XVI. MDOT RESPONSIBILITIES (GENERAL)

- A. Schedule and/or conduct the following:
 - 1. Project related meetings.
 - 2. The Plan Review
 - 3. Utility Meetings.
 - 4. Quantity summary sheets and final item cost estimates.
 - 5. Packaging of plans and proposal.
- B. Furnish Special Details and pertinent reference materials.
- C. Furnish old plans of the project area.

- D. Furnish Microstation files from CS 76023 & 76024 JN 27898A; (1989) I-69 freeway construction and removal of WB Old 69 pavement. Microstation files include photogrammetric topographic mapping, government corners, government lines and roadway alignments.
- E. Furnish available design survey information from JN 27898A.
- F. Furnish MDOT ROW maps of project area.
- G. Supply information on existing pavement structure as necessary.
- H. Coordinate the collection of existing utility information and any necessary utility relocations.
- I. Furnish pavement core information (Consultant shall place information on plan sheets).
- J. Furnish soil boring information as necessary (Consultant shall place information on plan sheets).
- K. Furnish pavement design.
- L. Furnish diskette of file and instructions for the MDOT Stand Alone Estimator's Worksheet(SAEW).

XVII. VENDOR PAYMENT

All invoices/bills for services must be directed to the Department and follow the 'then current' guidelines. The latest copy of the "Professional Engineering Service Reimbursement Guidelines for Bureau of Highways" is available on MDOT's Bulletin Board System. This document contains instructions and forms that must be followed and used for invoicing/billing; payment may be delayed or decreased if the instructions are not followed.

Payment to the Vendor for Services rendered shall not exceed the "Cost Plus Fixed Fee Not to Exceed Maximum Amount" unless an increase is approved in accordance with the contract with the Vendor. All invoices/bills must be submitted within 14 calendar days of the last date of services being performed for that invoice.

Direct expenses will not be paid in excess of that allowed by the Department for its own employees. Supporting documentation must be submitted, with the invoice/bill, for all billable expenses on the Project. The only hours that will be considered allowable charges for this contract are those that are directly attributable to the CE activities of this Project. Hours spent in administrative, clerical, or accounting roles for billing and support, are not considered allowable hours; there will be no reimbursement for these hours.

Reimbursement for overtime hours will be limited to time spent on this project in excess of forty hours per week. Any variations to this rule should be included in the price proposal

ATTACHMENT A
CS 76823 – JN 80734C
Old 69 (Lansing Road), Shiawassee County

SURVEY SCOPE OF WORK

Survey Mapping Limits: As needed for Design

NOTES: The consultant surveyor shall discuss the scope of this survey with the consultant design engineer before initiating any work on this project. A detailed Survey Work Plan with an estimate of hours by specific survey task such as traversing, leveling, mapping, etc., **must** be included in the project proposal.

It is the responsibility of the Professional Surveyor to safeguard all corners of the United States Public Land Survey System, published Geodetic Control and any other Property Controlling corners that may be in danger of being destroyed by the proposed construction project.

GENERAL REQUIREMENTS:

1. Surveys must comply with **all Michigan law** relative to land surveying.
2. Surveys must be done under the **direct supervision** of a Professional Surveyor licensed to practice in the State of Michigan.
3. Work in any of the following categories of survey: Road Design, Bridge, Hydraulic, Right-of-Way, Ground Control (Photogrammetric), and/or Geodetic control, must be completed by a survey firm which is pre-qualified by MDOT.
4. Surveys must meet all requirements of the Michigan Department of Transportation (MDOT) Design Surveys *Standards of Practice* dated April 1, 1998. Please contact the Design Survey office to clarify any specific questions regarding these standards.
5. Consultants must obtain all necessary permits, including an up-to-date permit from the MDOT Utilities Coordination and Permits Section, required to perform this survey on any public and/or private property.
6. The consultant must adhere to all applicable OSHA and MIOSHA safety standards, including the appropriate traffic signs for the activities and conditions for this job.
7. Consultants are responsible for a comprehensive and conscientious research of all records, including MDOT records, essential for the completion of this project.

8. Measurements, stationing, recorded data, and computations must be in metric units, unless specified otherwise by the Project Manager.
9. Coordinate values shall be based upon the Michigan State Plane coordinate system NAD83. This requirement *may* be waived if GPS is not available. If terrestrial traverse methods are employed, and NGS control is not available within 6 km., a local project coordinate control system may be accepted. All elevations must be based upon the North American Vertical Datum of 1988 (NAVD88) if control is available within 6 km. If not, existing MDOT plan datum is acceptable. Other datums must be approved by the MDOT Design Division, Supervising Land Surveyor. A preliminary submittal of the adjusted Horizontal and Vertical control for the project may be submitted to the Survey Consultant Project Manager for review and acceptance as soon as it is available.
10. The survey notes must be submitted to the Design Survey Unit in 10" (254 mm) by 12" (305 mm) divided portfolios with flap covers. As many portfolios should be used as needed to contain all of the required documents and diskettes
11. Each portfolio must be labeled on the outside as in the following example:

Survey Notes for:

Route, Location and Project Limits [I-94 under Beaubien Street]

Control Section [S06-82024] Job Number [45197D] Date [*of submittal*]

By [*Name of Firm*]

Michigan Professional Surveyor [] License # []

12. Each submittal is to be divided into five sections. These sections are to be labeled as follows: **Administrative, Alignment, Control, Property,** and **Miscellaneous.**
 - a. The administrative section will include the following items: a completed copy of the MDOT Form 222(3/99) entitled SURVEY NOTES: RECEIPT AND TRANSMITTAL; the limits of the survey and original survey scope as determined by the consultant Surveyor and Design Engineer; a complete synopsis of the survey **that shall include, but not be limited to** horizontal and vertical control datums used, methodology, a complete discussion of government corners recovered, perpetuated or otherwise used as part of the survey, problems encountered, and a statement of certification from the consultant surveyor supervising the project as to compliance with Michigan Department of Transportation (MDOT) Design Surveys *Standards of Practice* dated April 1, 1998; as well as documentation of all project specific meetings and /or conversations with MDOT Survey personnel.
 - b. The Alignment section will contain a sketch of the alignment, witnesses and stationing of alignment points set or found; an explanation of how the alignment was determined, whether best fit or legal; and all supporting documentation.

- c. The Control section contains the data collected and copies of all research documents used to establish the **horizontal and vertical** reference systems for the project, and includes a thorough written explanation describing how the systems were established. This section should also contain a complete list of control coordinates, control traverse raw data, least squares analysis for both traverse and benchmarks, a separate listing of control point coordinates and witnesses for mapping and construction staking of the project. A complete Benchmark list with datum, station and offset, elevation, and description of each benchmark shall also be included. This information must be submitted in hardcopy and ASCII electronic file format on 88.9 mm (3.5") HD diskettes. Also, a sketch of the control traverse, showing any ties (government corners, property, alignment, etc.) shall be included in this section.
 - d. The Property section contains all information that is utilized regarding the real property affected by the project, and all necessary property ties. This may include copies of all **recorded** land corner recordation certificates for the government corners used or reestablished, recorded plats, recorded certified surveys, tax maps, tax descriptions, and adjacent/riparian owners.
 - e. The Miscellaneous section contains any information not included in the previous sections. The surveyor's project report should specify any items included in this section.
- 13. A portfolio may contain several types of data but, no section is to contain more than a single type (i.e., Bridge surveys separate from Road surveys and Hydraulic surveys). All sheets in a portfolio must be marked with the control section, job number, portfolio section name and page number. Diskettes must be labeled with the control section, job number, data type and file names.
 - 14. The Consultant representative shall record and submit typewritten minutes for all project related meetings to the MDOT Project Manager within two weeks of the meeting. The Consultant shall also distribute the minutes to all meeting attendees.
 - 15. The MDOT Project Manager is the official contact for the Consultant. The Consultant must either address, or send a copy of all correspondence to the MDOT Project Manager. The MDOT Project Manager shall be made aware of all communications regarding this project. Any survey related questions, in regard to this project, should be directed to a Survey Consultant Coordinator.

At the completion of this survey and prior to beginning the design of this project, all field survey notes, all electronic data, and all research records obtained for this project will be considered the property of MDOT and **must be sent to** the MDOT, Design Division, Supervising Land Surveyor, P.O. Box 30050, Lansing, MI 48909. Please use MDOT's Form 222(3/99) entitled SURVEY NOTES: RECEIPT AND TRANSMITTAL for all transmittals. A copy of this

transmittal form must also be sent to the Project Manager. It is highly recommended that the project's survey portfolios be submitted for review as soon as possible.

FIELD SURVEY

The purpose of the field survey is to obtain all information and data required by the project design engineer, to leave control in the field for future construction staking, and to provide a sufficient history of the area to enable the MDOT Design Survey Unit to perform dependable surveys in the future. The consultant surveyor must discuss the scope of this survey with the project design engineer before initiating any work on this project. Notes of this meeting and a detailed Survey Work Plan with an estimate of hours broken down by specific survey task must be submitted to the Project Manager and Consultant Coordinator within two weeks of this meeting.

The consultant surveyor must contact the County Remonumentation Representative prior to beginning work on the project to inform him of proposed corner perpetuation activities, and to obtain information pertinent to PLSS corners and/or property controlling corners affected by project construction.

FINAL REPORT: DELIVERABLES

The final report for this project shall include the following:

1. In the first pocket of the first portfolio, MDOT's Form 222(3/99) entitled SURVEY NOTES: RECEIPT AND TRANSMITTAL and the project's Professional Surveyor's Report on company letterhead consisting of the following:
 - a. A comprehensive report, written and signed by the project's Professional Surveyor, of the work performed on this project.
 - b. The source and the methods used to establish the project horizontal coordinates, elevations, and the alignment(s) for this project.
 - c. A detailed explanation of anything discovered during the survey of this project that may create a problem for the designer or another surveyor.
2. Coordinate and witness lists for the horizontal alignment ties, government corners, traverse control points, and bench marks.
3. A sketch of the alignment with reference points and angle of crossing (if appropriate), horizontal coordinates, curve data, and a station equation to existing stationing in feet.
4. Least squares analysis for horizontal and vertical control.

5. Documentation of horizontal and vertical datum sources.
6. Control sketch with control points, government corners and alignment plotted.
7. All field survey notes, all electronic survey data files, all calculation sketches, and all research records obtained for this project. All electronic survey data files shall be submitted on 88.9 mm (3.5") HD diskettes only, specifically labeled. No paper copy of raw survey data is required.
8. Legible copies of all **recorded** Land Corner Recordation Certificates (with Liber and Page number) filed or used for the performance of this survey, and for any PLSS corners, including Property Controlling Corners, which may be disturbed by construction.
9. It is the responsibility of the consultant to insure that all electronic files submitted to MDOT conform to the required format and all documents are legible.
10. The consultant must organize and label the various sections of the portfolios as required by the MDOT Design Surveys *Standards of Practice* dated April 1, 1998.
11. It is not necessary to submit mapping data in the survey portfolio for a consultant survey/consultant design in the same authorization.

ATTACHMENT B
CS 76823 – JN 80734C
Old 69 (Lansing Road), Shiawassee County

VIDEO PHOTOGRAPHY SCOPE OF WORK

NOTES: The consultant shall discuss the scope of this video photography with the MDOT Project Manager before initiating any work on this project. A detailed Work Plan with estimate of hours **must** be included in the project proposal. This scope of work shall be part of **P/PMS TASK 3580**.

The limits of videotaping storm sewer for this project is described as follows:
single run of approximately 850 feet in length of 12-inch diameter storm sewer
flowing from south to north under the Old 69 roadway at approximate station
762+00 with a catch basin on the south end and a catch basing approximately
mid-way in the run.

**GENERAL CONDITIONS AND SPECIFICATIONS FOR VIDEO RECORDING
STORM SEWERS:**

1. The storm sewer described above will be video recorded. Although not limited to the following, the majority of storm sewers are 12 inches in diameter.
2. Video recordings, shall be performed during minimal storm water flow periods in order to maximize picture quality. The television camera and lighting shall be specifically designed for storm sewer inspection and recording. All video recordings shall be in VHS color.
3. The consultant or contractor shall provide labor, equipment, and material to clean each storm sewer necessary in order to video record a clear, precise picture of the storm sewer conditions. For the disposal of the waste generated from the cleaning refer to Supplemental Specification 403(1). The labor, equipment, and materials necessary for the cleaning shall be include removal, transportation, and disposal of the debris at no extra cost. **The Department shall not be held liable for the loss or damage to any of the contractor's labor, equipment, or materials.**
4. The camera shall be moved through the line, in either direction, at a rate no greater than 9.144-meters (30-feet) per minute. Stopping may be necessary to properly document the sewer's condition. Winches, TV Cable, rewind, and other devices must not obstruct the camera view or interfere with proper documentation. If during the inspection, the camera will not pass through an entire section, the contractor shall set up his equipment to enter from the opposite opening. If again, the camera fails to pass through, the inspection shall

be considered complete. The camera shall be capable of rotating from side to side to provide views of joint openings

5. All traffic control and traffic control devices to videotape shall be provided by the consultant or its contractor.
6. The contractor shall observe good housekeeping practices at all times during his operations at no extra cost.
7. In the event hazardous materials become an issue; testing and disposal fees will be negotiated separated to this agreement.

FINAL DELIVERABLES

The consultant shall provide, the Department **three (3)** copies of the video recording and written reports. Measurements of the total sewer length and locations of noted sewer defects shall be recorded on the video tape **and** on the written report describing the findings. **The consultant shall include in the written report, recommendations of storm sewer areas that need to be reconstructed. Based on these findings, MDOT will determine at which location storm sewers will be reconstructed.**

Video tapes and reports will be submitted to the MDOT Project Manager two (2) weeks prior to Base Plan submittal. The tapes shall be edited and have audio production. Once submitted, title to the tape recordings shall become the property of the Department.

ATTACHMENT C
CS 76823 - JN 80734C
Old 69 (Lansing Road), Shiawassee County

MDOT DESIGN CONSULTANT MANUAL

The MDOT Design Consultant Manual is now listed on the MDOT Bulletin Board System and can be found under the PPMS Library (File name = Combined_Manual.pdf). An index of the latest version of the task descriptions along with any revisions will be included as part of this authorization.

CONSULTANTS are still encouraged to review and provide comment on the draft pages from the MDOT Design Consultant Manual. Please send suggestions to:

Kathy Hulley
Supervising Engineer
Operations Contract Support
Michigan Department of Transportation
425 West Ottawa
P.O. Box 30050
Lansing, MI 48909

ATTACHMENT D
CS 76823 – JN 80734C
Old 69 (Lansing Road), Shiawassee County

MONTHLY PROGRESS REPORTS

The first two pages of this attachment are the necessary layout of the Monthly progress reports and the last three pages are a completed example.

Control Section 00000
Job Number 00000C
Structure Number S00
Date 00/00/00

MONTHLY PROGRESS REPORT

- A. Work accomplished during the previous month.
- B. Anticipated work items for the upcoming month.
- C. Real or anticipated problems on the project.
- D. Update of previously approved detailed project schedule (attached), including explanations for any delays or changes.
- E. Items needed from MDOT.
- F. Copy of Verbal Contact Records for the period (attached).

Structure Number - Control Section - Job Number
Route, Location Description
Design Schedule as of 00/00/95

LIST TASKS, SUBMITTALS, APPROVALS AND MEETINGS AS OUTLINED IN SCOPE OF DESIGN SERVICES AS NEEDED. THIS LIST IS JUST AN EXAMPLE.

Original Authorized Start Date	Original Authorized Finish Date	(Anticipated) or Actual Start Dates	(Anticipated) or Actual Finish Dates	Task	Task Description
00/00/00	00/00/00	00/00/00	00/00/00	??	Initial project meeting.
00/00/00	00/00/00	00/00/00	00/00/00	3330	Conduct Design Survey..
00/00/00	00/00/00	00/00/00	00/00/00	3360	Prepare Base Plans
00/00/00	00/00/00	00/00/00	00/00/00		Submit Base Plans
00/00/00	00/00/00	00/00/00	00/00/00	3580	Develop Preliminary Plans
00/00/00	00/00/00	00/00/00	00/00/00	3390	Develop Construction Zone Traffic Control Concepts
00/00/00	00/00/00	00/00/00	00/00/00	3540	Develop Construction Zone Traffic Control Plan
00/00/00	(00/00/00)	00/00/00	00/00/00	3550	Develop Preliminary Traffic Operations Plan.
00/00/00	(00/00/00)	00/00/00	00/00/00	3351	Review & Submit of Preliminary Right-Of-Way Plans.
00/00/00	(00/00/00)	00/00/00	00/00/00		Submittal of The Plan Review Package.
00/00/00	(00/00/00)	00/00/00	00/00/00		Completion of the Plan Review Meeting.
00/00/00	(00/00/00)	00/00/00	00/00/00	3840	Develop Final Plans and Specifications
00/00/00	(00/00/00)	00/00/00	00/00/00		Submittal of final plans/proposal package to MDOT for final review.
00/00/00	00/00/00	00/00/00	00/00/00	3870	Omissions/Errors Check (OEC) Meeting
00/00/00	00/00/00	00/00/00	00/00/00		Consultant=s Plan Completion: Final Construction Plan/Proposal package with recommendations incorporated to MDOT (two weeks after OEC Meeting)
00/00/00	00/00/00	00/00/00	00/00/00		Final Deliverables to MDOT

MONTHLY PROGRESS REPORT

- A. Work accomplished during the previous month.
 - 1. During the last month we completed the Final Right of Way plans and submitted them to Thomas Nelson, Jr. on 05/01/99.
- B. Anticipated work items for the upcoming month.
 - 1. Submit the Preliminary Plans and related material on 03/11/99.
 - 2. Attend the meeting regarding the Ameritech lines on the bridge, scheduled for 03/12/99.
- C. Real or anticipated problems on the project.
 - 1. We foresee no problems at this time.
- D. Update of previously approved detailed project schedule (attached), including explanations for any delays or changes.
 - 1. The design is falling behind schedule because we had problems resolving the geometries of the ramps in relation to the bridge. The Preliminary Plan submittal will be the only task affected by this delay because we will make up the lost time prior to submitting the Final Plans and Specifications.
- E. Items needed from MDOT.
 - 1. Prior to final Plan submittal we will need the latest Special provision and Supplemental Specification checklist.
- F. Copy of Verbal Contact Records for the period (attached).
 - 1. Discussed bridge and ramp geometries with Tom Myers of M\$DOT Traffic and Safety Division on 07-24-95.

SN: S02 - CS: 12345 - JN: 11111C
M-111, from There Village Limits to north of That Road
Design Schedule as of 07/31/95

Original Authorized Start Date	Original Authorized Finish Date	(Anticipated) or Actual Start Dates	(Anticipated) or Actual Finish Dates	Task	Task Description
01/12/95	01/12/95	01/12/95	01/12/95 ??		Initial project meeting.
01/29/95	01/29/95	01/30/95	01/30/95 3330		Conduct Design Survey.
02/17/95	04/10/95	02/17/95	04/20/95 3360		Prepare Base Plans.
02/29/95	02/29/95	02/29/95	02/29/95 3390		Develop the Construction Zone Traffic Control Concepts
03/12/95	03/13/95	03/12/95	(03/30/95)	3540	Develop Construction Zone Traffic Control Plan
03/20/95	03/19/95	03/25/95	(03/30/95)	3551	Develop/Review Preliminary Traffic Signal Plan
07/01/95	07/01/95	(07/01/95)	(07/01/95)	3590	The Plan Review Meeting
07/11/95	08/11/95	(07/11/95)	(08/11/95)	3821	Complete/Review Traffic Signal Plan
09/15/95	09/15/95	(09/15/95)	(09/15/95)	3830	Complete Construction Zone Traffic Control Plan.
09/16/95	09/16/95	(09/16/95)	(09/16/95)	3840	Develop Final Plans and Specifications
09/25/95	09/23/95	(09/25/95)	(09/25/95)	3870	Omissions/Errors Check (OEC) Meeting

VERBAL CONTACT RECORD

Control Section 12345

Job Number 11111C

Structure Number S02

Date 07/31/95

Joe Engineer talked to Tom Myers and decided to use a 0.05'/ft super on ramp A leading into the bridge.

P/PMS TASK - INDEX - VERSION 2 rev 2
ISSUED 9/29/2000

P/PMS TASK	CURRENT DATE	LATEST REVISION DATE
3120 - CONDUCT STRUCTURE DECK CONDITION SURVEY	07/29/99	
3330 - CONDUCT DESIGN SURVEY	07/29/99	
3340 - CONDUCT STRUCTURE SURVEY	07/29/99	
3350 - CONDUCT HYDRAULICS SURVEY	07/29/99	
3360 - PREPARE BASE PLANS	06/22/99	
3361 - REVIEW AND SUBMIT PRELIMINARY RIGHT OF WAY (PROW) PLANS	07/16/99	
3370 - PREPARE STRUCTURE STUDY	06/16/99	
3380 - REVIEW BASE PLANS	06/29/99	
3390 - DEVELOP THE CONSTRUCTION ZONE TRAFFIC CONTROL CONCEPTS	07/16/99	
3510 - PERFORM ROADWAY GEOTECHNICAL INVESTIGATION	07/29/99	
3520 - CONDUCT HYDROLOGIC, HYDRAULIC AND SCOUR ANALYSES	08/29/00	revised per P. Schrinier
3530 - CONDUCT FOUNDATION STRUCTURE INVESTIGATION	07/16/99	
3540 - DEVELOP CONSTRUCTION ZONE TRAFFIC CONTROL PLAN	07/16/99	
3551 - DEVELOP/REVIEW PRELIMINARY TRAFFIC SIGNALS PLAN	07/16/99	added to index 1/5/2000
3552 - DEVELOP PRELIMINARY PERMANENT PAVEMENT MARKING PLAN	07/16/99	
3553 - DEVELOP PRELIMINARY NON - FREEWAY SIGNING PLAN	07/16/99	
3554 - DEVELOP PRELIMINARY FREEWAY SIGNING PLAN	07/16/99	
3570 - PREPARE PRELIMINARY STRUCTURE PLANS	07/16/99	
3580 - DEVELOP PRELIMINARY PLANS	06/30/99	
3581 - FINAL RIGHT-OF-WAY PLANS	07/16/99	
3590 - REVIEW PRELIMINARY PLANS	06/29/99	

P/PMS TASK	CURRENT DATE	LATEST REVISION DATE
3670 - DEVELOP MUNICIPAL UTILITY PLANS	06/30/99	
3675 - DEVELOP ELECTRICAL PLANS	07/01/99	
3710 - DEVELOP REQUIRED MITIGATION (FOR INFORMATION ONLY, THIS IS NOT A CONSULTANT TASK)	07/16/99	
3720 - SUBMIT ENVIRONMENTAL PERMIT APPLICATIONS (FOR INFORMATION ONLY, THIS IS NOT A CONSULTANT TASK)	07/16/99	
3821 - COMPLETE/REVIEW TRAFFIC SIGNAL PLANS	07/16/99	
3822 - COMPLETE PERMANENT PAVEMENT MARKING PLAN	07/16/99	
3823 - COMPLETE NON-FREEWAY SIGNING PLAN	07/16/99	
3824 - COMPLETE FREEWAY SIGNING PLAN	07/16/99	
3830 - COMPLETE CONSTRUCTION ZONE TRAFFIC CONTROL PLAN	06/22/99	
3840 - DEVELOP FINAL PLANS AND SPECIFICATIONS	07/02/99	
3850 - DEVELOP STRUCTURE FINAL PLANS AND SPECIFICATIONS	07/29/99	
3870 - HOLD OMISSIONS/ERRORS CHECK (OEC) MEETING	07/13/99	
4120 - OBTAIN PRELIMINARY TITLE COMMITMENTS	06/29/99	
4130 - PREPARE MARKED FINAL R.O.W. PLANS	06/29/99	
4140 - PREPARE PROPERTY LEGAL INSTRUMENTS	06/29/99	
5010 - CONSTRUCTION PHASE ENGINEERING ASSISTANCE	07/29/99	